



**NYCDOE**

**Quality Review: Final Report**

# **The New York City Department of Education**



# **Quality Review Report**

**The High School for Construction Trades,  
Engineering and Architecture**

**High School 650  
94 - 06 104th Street  
Queens  
NY 11416**

**Principal: Quintin Cedenó**

**Dates of review: March 5 - 6, 2008**

**Lead Reviewer: Shehz Ali**

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## Part 1: The school context

### Information about the school

The High School for Construction Trades, Engineering and Architecture (CTEA) is a high school with 382 students from grade 9 through grade 10. The school population comprises 11.8% Black, 42.9% Hispanic, 15.7% White, and 29.6% Asian students. The student body includes 0.5% English language learners and 5.2% special education students. Boys account for 67.3% of the students enrolled and girls account for 32.7%. The average attendance rate for the school year 2006-2007 was 95.1%. The school is in receipt of Title 1 funding with 57% eligibility.

## Part 2: Overview

### What the school does well

- The administrative team works well together to ensure fidelity to the school's mission and a positive direction for the school.
- Teachers work very hard together to successfully integrate a curriculum that balances rigorous academics with construction, engineering and architecture.
- Staff and students get along well and celebrate the small, close-knit community of the school.
- The school's culture of high expectations continues to foster imaginative, relevant and innovative work from students.
- The school bases action plans on data and differentiates them for individual teachers and subject areas.
- Constant collaboration and school retreats ensure school wide ownership of practice and develop strong capacity in data analysis for staff.
- Together, the staff monitor and evaluate the school's program continually and respond with relevant plans to continue growth and progress.
- Lessons engage students who work hard in class.

### What the school needs to improve

- Further disaggregate and generate comparative data to determine and communicate trends and patterns in achievement and progress with additional subgroups.
- Provide additional professional development for core content teachers in construction, engineering and architecture to further the integration of the curriculum.
- Support staff in differentiating instruction to meet the needs of all students.

## Part 3: Main Findings

### **Progress made since the last review**

The school has made good progress in addressing the issues identified in the previous Quality Review report.

### **Overall Evaluation**

#### **This school is well developed.**

The High School for Construction Trades, Engineering and Architecture offers a unique program for students wishing to seek out a rigorous academic curriculum coupled with a strong foundation in project-based construction, engineering and architecture. The school has already shown impressive gains in its first year and a half since its opening and demonstrates well-established structures thanks to a well experienced and forward-thinking administration. Through a committed and collaborative staff, the school uses data well to plan for the continued improvement of students and the expected growth and expansion of the school. All staff are directly involved in effective school wide planning and therefore are empowered to initiate change and foster continued progress of the school's educational program. Teachers are willing and able to go beyond for their students and are open and willing to try anything to ensure students learn and achieve more each day.

Relationships are strong at the school as all stakeholders celebrate the family feeling within the school. Communication among the school community is strong with students having a formal voice in school wide decision making. Students are the central focus of all decisions and as a result are excited about learning and motivated to respond to the high expectations in the school. The school works hard to place students in appropriate classes but not all teachers differentiate lessons to meet the needs of students. Despite professional development, some core content teachers require further training in construction, engineering and architecture to support further curriculum integration.

The school has made good progress since the last Quality Review. Their use of data and resulting plans continues to provide effective instruction and programming for students. However, the school does not yet disaggregate data to make formal comparison of the progress of subgroups with that of general education students or to look at the various subgroups within ethnicities to determine further trends. The primary function of the well-structured inquiry team is as an avenue to pilot ideas and initiatives. The team effectively meets the needs of student in their focus group.

### **How well the school meets New York City's evaluation criteria**

**Quality Statement 1 – Gather Data: School leaders and faculty consistently gather data and use it to understand what each student knows and is able to do and to monitor the student's progress over time.**

**This area of the school's work is proficient.**

The school collects both qualitative and quantitative data regularly to ensure a constant understanding of student achievement and progress throughout the school. Report cards at each marking period and progress reports between each report card interval provide regular, up-to-date achievement data on each student that the school adequately analyze for trends and patterns. The school augments this quantitative data well with qualitative report card comment code, frequently documented conversations, and comparisons in attendance data. Because of this breadth of data collection, teachers and staff program and target intervention specifically for individual students very well. The school has plans to add analyzable data regarding home life and parental involvement to their ever-growing bank of data.

The administration knows subgroup data well. Due to some staffing difficulties out of the control of the school, special education students are not performing as well as last year. The school recognizes that the achievement gap between ethnic groups is shrinking and the small, but growing, population of girls outperforms boys. However, the school does not disaggregate this information further in order to make formal comparison of the progress of subgroups with that of general education students or to look at the various subgroups within ethnicities to determine further trends. As the school is only in its second year, it is only able to compare data with last year. While using last year's data as a baseline, the school shows evidence of growth and clear student progress. The school also does very well to collect eighth grade data on incoming freshman and ensure that it is able to place new students accurately and ensure proper programming.

**Quality Statement 2 – Plan and Set Goals: School leaders and faculty consistently use data to understand each student's next learning steps and to set suitably high goals for accelerating each student's learning.**

**This area of the school's work is well developed.**

The school bases its planning firmly on the results from data analysis and carries this out with all staff members. Use is made of staff retreats held in the summer and throughout the year, primarily for school wide planning and action plan revision. Along with teachers, the administration creates effective, detailed action plans in order to further the growth in the quality of the educational program throughout the school. For example, data analysis indicating common student skills deficiencies led to integrated, skills-based projects for students where teachers assess skills acquisition in addition to standards-based content. Teachers revisit and redistribute the bank of skill-focused projects to sustain and support skills development for all students. As part of a school wide literacy initiative, the inquiry team chose 30 struggling English language arts students to pilot programs. As part of continuous development and constant analysis of progress, the school implements proven intervention plans and processes to aid student achievement. Action plans support the school's goal to improve second marking period declines. Teachers created individual action plans for their classes and as a result, third marking period data shows distinct growth when compared to the previous marking periods.

The school communicates information very well to the greater school community. While students could not specifically articulate school wide goals, they could describe action and results from newly implemented programs. Parents celebrate the level of communication, openness and support offered by the school. They receive regular notice regarding school events, programs and partnerships as well as information that refers to specific trends and patterns evident in school wide achievement data. Parents

are very satisfied with the open door policy of the principal and teachers and receive information regarding their children more often than the school standard eight times per year. As a result, parental involvement continues to grow and parents play a distinct part in shaping the future and continued, sustained growth of the school.

**Quality Statement 3 – Align Instructional Strategy to Goals: The school aligns its academic work, strategic decisions and resources, and effectively engages students around its plans and goals for accelerating student learning.**

**This area of the school’s work is well developed.**

Instruction is of a high quality. This is because of a constantly improving faculty open to new ideas, which shares best practices regularly. As a result, teachers hold each other accountable to high standards. Meetings and planning require teachers’ insight and information to make continuous improvements to the curriculum. Along with administration, teachers expect each other to break down data, provide solutions to information discovered through detailed student data analysis and share best practices in a culture of strong mutual support and respect. Students too, celebrate the relationships throughout the school and are proud of their role in ensuring students from both grades get along and work together. Students are very engaged and take part in productive work that is both relevant and innovative. They produce real world projects that provide further motivation toward future careers in construction engineering and architecture and provide added confidence to students. The rigorous academic and CTEA curriculum ensures students work hard, however, as one student said, “The school makes the hard work easy.” The well-designed curriculum promotes good integration across subjects. The school continually revisits key content areas in literacy and math to ensure it makes links throughout student learning. While the school groups students into classes that match achievement levels, there is insufficient differentiation of instruction within classes. Students do the same work and teachers do not group students well enough to challenge some groups of students within a lesson.

Attendance is strong and figures have improved from last year’s 94.4% to 95.1%. While the school does little to encourage attendance specifically, more effectively, the staff have created an environment whereby students want to come to school and want to be in classes. The prevalence of group projects throughout the school means students hold each other accountable for attendance. The school deals immediately with students who encounter attendance difficulties through conferences and parent phone calls.

**Quality Statement 4 - Align Capacity Building to Goals: The development of leadership, teachers and other staff capacity is aligned to the school’s collaboratively established goals for accelerating the learning of each student.**

**This area of the school’s work is well developed.**

The administration does good work in building capacity throughout the school. Summer retreats ensure that all staff are involved in school wide planning and develop strong capacity in teachers’ data analysis and response to identified trends. As a result, staff have a deep sense of ownership over programming and student achievement. The unique educational program, as well as the new building and ample resources, instill a deep sense of pride and motivation for continued work for all staff and students.

Summer retreats also provide a solid foundation for ongoing, weekly professional development during the school year. The administration chooses weekly professional development in response to school wide or teacher need. The frequency of sessions allows the school to revisit areas in need of further development and ensures a constant school wide communication and focus. Core content teachers however, are not fully confident and secure with teaching or supervising CTEA themed projects despite some professional development in these areas. The school provides good induction for new teachers particularly regarding the unique curriculum with specific, summer training in their CTEA area. Teachers are rightly encouraged to seek further accreditation and training in advanced technologies and techniques in CTEA areas. In addition, teachers make frequent visits to each other's classrooms and share best practice constantly.

The school's Core Values action plan serves to meet the needs of student behavior very well. Students not only know what the school's twelve core values are, but they are able to describe specific behavior and traits associated with them. Core Values "cards" teachers hand out when exemplary behavior is noted, truly motivate students, and, as a result, the school serves students' social needs well. Advisory periods serve to foster deeper relationships among staff and students and good use is made of them to infuse college thinking and teen development discussions into the daily routine. The school's unique educational program relies on partnerships for its continued growth and level of up-to-date technology and training.

**Quality Statement 5 - Monitor and Revise: The school has structures for evaluating each student's progress throughout the year and for flexibly adapting plans and practices to meet its goals for accelerating learning.**

**This area of the school's work is well developed.**

The school's strong plans allow for constant monitoring and revision of teacher-specific and school wide plans. With timely reporting and regular school wide collaborative meeting and planning time, the staff regularly measure, revisit and analyze the effectiveness of the overall educational program along with specific action plans. The school pilots many initiatives in small groups then implements them when analysis demonstrates an effective impact on students. For example, the school has constantly developed its use of rubrics. Teacher-created, and then student-created rubrics have become commonplace in classrooms. The school has revamped test simulations in order to increase their predictive value because last year's simulations showed varied disconnected information and were not as useful as they might have been.

The school is already in the midst of planning for next year, as the administration is keenly aware of the difficulties and challenges the school will face as it doubles in size, once again. The administration plans to set up systems proactively in order to determine and compare additional subgroups and then compare the effectiveness of programs on those subgroups. In addition, the school continues to strengthen the sustainability of the CTEA program through new construction initiatives and funding sources. As the school continues its dramatic growth and transformation, it is constantly aware of the need to make effective plans for the upcoming years to sustain the quality currently evident in the school.

## Part 4: School Quality Criteria Summary

**SCHOOL NAME: High School for Construction Trades, Engineering and Architecture**

**Quality Score**

Δ	▷	✓	+	◇
			X	

**Quality Statement 1 – Gather Data: School leaders and faculty consistently gather and generate data and use it to understand what each student knows and is able to do and to monitor the students progress over time.**

**To what extent do school leaders and faculty provide . . .**

	Δ	▷	✓	+	◇
1.1 an objective, constantly updated understanding of the performance and progress of each student, classroom, grade level?				X	
1.2 an objective, constantly updated understanding of the performance and progress of special education students?			X		
1.3 an objective, constantly updated understanding of the performance and progress of English language learners?			X		
1.4 an objective, constantly updated understanding of the performance and progress of ethnic groups, gender groups and all other categories of interest to the school?			X		
1.5 a measurement of performance and progress based on the school's own past performance, and among students, classrooms, grades and subject areas?				X	
1.6 a measurement of performance and progress based on comparisons with similar schools?			X		
1.7 training, management systems and structures that support teachers in the use of school data to inform planning and instruction and to track the progress of students?				X	

**Overall score for Quality Statement 1**

			X		
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**Quality Statement 2 – Plan and Set Goals: School leaders and faculty consistently use data to understand each student's next learning steps and to set suitably high goals for accelerating each students learning.**

**To what extent do school leaders and faculty . . .**

	Δ	▷	✓	+	◇
2.1 engage in collaborative processes to set rigorous, objectively measurable goals for improvement, and to develop plans and timeframes for reaching those goals?				X	
2.2 focus on each student, classroom, grade level, academic subject and group of students whose performance or progress has been identified by the school as a particular focus area?				X	
2.3 identify and improve the performance and progress of those students in greatest need of improvement?				X	
2.4 share whole school goals with all members of the school community to rigorously improve the performance and progress of students?				X	
2.5 convey consistently high expectations to students and their parents/caregivers?				X	
2.6 regularly provide students and their parents/caregivers with information about the goals set for each student, and about each student's progress and performance, and how they can improve?				X	
2.7 invite and enable parents/caregivers to provide useful information to teachers and the school about the learning needs and capacities of their children?				X	

**Overall score for Quality Statement 2**

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**Quality Statement 3 – Align Instructional Strategy to Goals: The school aligns its academic work, strategic decisions and resources, and effectively engages students around its plans and goals for accelerating student learning.**

**To what extent does the school . . .**

	Δ	▷	✓	+	◇
3.1 select core curricular approaches that facilitate and provide meaningful interim data about progress towards goals and focus on raising the achievement of students?				X	
3.2 provide a broad and engaging curriculum, including the arts, to enhance learning both within and outside the school day?				X	
3.3 hold teachers accountable for the progress and learning of the students in their charge, for making instruction interesting and compelling, and for creating a positive safe and inclusive learning environment?				X	
3.4 ensure that teachers use school, class and student data to plan for and provide differentiated instruction that meets the specific needs of all the students in their charge?			X		
3.5 make budgeting, staffing and scheduling decisions strategically, based on data, to meet the school's academic goals for all students?				X	
3.6 ensure that there is an environment of mutual trust and respect between all staff and students to support personal and academic development?				X	
3.7 ensure that there are effective and consistently applied procedures to encourage and monitor student attendance and tardiness?				X	

**Overall score for Quality Statement 3**

				X	
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<b>Quality Statement 4 – Align Capacity Building to Goals: The development of leadership, teachers and other staff capacity is aligned to the school’s collaboratively established goals for accelerating the learning of each student.</b>					
<b>To what extent does the school . . .</b>	<b>Δ</b>	<b>➤</b>	<b>✓</b>	<b>+</b>	<b>◇</b>
4.1 use frequent observations of classroom teaching by the principal and other available information to develop a differentiated strategy for improving the quality of each teacher’s instruction?				X	
4.2 make professional development decisions strategically, based on data, to help meet the improvement goals of students and teachers?				X	
4.3 provide frequent opportunities for teachers to observe each other’s classroom instruction and to meet together in teams to plan, share effective practices, and evaluate one another’s instruction in an open and reflective professional environment?				X	
4.4 develop effective procedures for the induction and support of teachers who are new to the profession or the school?				X	
4.5 align youth development, guidance/advising and other student support services around stated academic and personal development goals?				X	
4.6 consistently implement clear procedures that enable the school to run smoothly and encourage effective student learning, and effectively address discipline related incidents?				X	
4.7 create effective partnerships with outside entities that support the academic and personal growth of the students?				X	
<b>Overall score for Quality Statement 4</b>					X

<b>Quality Statement 5 – Monitor and Revise: The school has structures for evaluating each student’s progress throughout the year and for flexibly adapting plans and practices to meet its goals for accelerating learning.</b>					
<b>To what extent do . . .</b>	<b>Δ</b>	<b>➤</b>	<b>✓</b>	<b>+</b>	<b>◇</b>
5.1 the school’s plans for improving student outcomes include interim goals that are objectively measurable and have suitable time frames for measuring success and making adjustments?				X	
5.2 the school’s plans for improving teacher outcomes include interim goals that are objectively measurable and have suitable time frames for measuring success and making adjustments?				X	
5.3 teachers and faculty use periodic assessments and other diagnostic tools to measure the effectiveness of plans and interventions for individual and groups of students in key areas?				X	
5.4 teachers and faculty use the information generated by periodic assessments and other progress measures and comparisons to revise plans immediately in order to reach stated goals?			X		
5.5 school leaders track the outcomes of periodic assessments and other diagnostic measures and use the results to makes strategic decisions to modify practices to improve student outcomes?				X	
5.6 school leaders and staff use each plan’s interim and final outcomes to drive the next stage of goal setting and improvement planning?				X	
5.7 the principal and school community have a clear vision for the future development of the school and implement procedures and systems to effect change?				X	
<b>Overall score for Quality Statement 5</b>					X

◇	<b>Outstanding</b>
+	<b>Well Developed</b>
✓	<b>Proficient</b>
➤	<b>Underdeveloped with Proficient Features</b>
Δ	<b>Underdeveloped</b>